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(54) Title: PROCESS FOR PREPARING (+)-2-(4-CHLOROPHENYL)-3-METHYL BUTANOIC ACID

(57) Abstract: The present invention relates to an environmentally benign process for preparation of (+)-2-(4-chlorophenyl)-3-methyl butanoic acid (+ CPA) from its racemic acid, using optically active arylamines like (-) PEA in hydrophilic/hydrophobic organic solvents like butanol, propanol etc. as aqueous mixtures, separating the desired (+) CPA salt, mother liquor by filtration and refining the (+) CPA salt in the same solvent system as used for resolution, recovering the desired acid in high optical purity by extracting with aqueous mineral acid. The mother liquor is concentrated under vacuum and extracted with aqueous mineral acid to obtain undesired (-) CPA which was recovered and recycled after racemization. The aqueous mineral acid layer thus obtained is mixed with corresponding aqueous mineral acid layer obtained from (-) CPA recovery and extracted with aqueous caustic solution to recover the optically active amine used for resolution. Thus the method described effectively provides a process for recovery and recycle of the undesired (-) CPA, optically active amine, besides obtaining the desired (+) CPA in high optical purity.



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